SMS75 HARNESS
USER GUIDE

Doc. 12-4163-r01 (5/1/14)

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NOTICES

LIMITED WARRANTY

For details, refer to the Product Warranty section on the Hollis web site: www.HollisGear.com

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SMS75 Harness User Guide, Doc. No. 12-4103
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PATENT NOTICE

U.S. Patents have been issued, or applied for, to protect the following design features: backpack systems (U.S. Patent No. 5,378,084, Gas Impermeable Laminate (U.S. Patent No. 5,693,412), Harness Buckle (U.S. Patent No. D409,114), Weight Drop System (U.S. Patent No. 5,218,745), Soft Backpack (U.S. Patent No. 4.952,095), and Compensating Waistband (U.S. Patent No. 4,732,305). Also other Patents Pending

EC TYPE EXAMINATION CONDUCTED BY:

SGS United Kingdom Ltd, Weston-super-Mare, BS22 6WA, UK Notified Body No: 0120'

Compliance with EN 1809:1997 Compliance with EN 250:2000

DANGERS, WARNINGS, CAUTIONS, AND NOTES

Pay attention to the following symbols when they appear throughout this document. They denote important information and tips.

! **DANGERS:** are indicators of important information that if ignored would lead to severe injury or death.

! **WARNINGS:** are indicators of important information that if ignored could lead to severe injury or death.

! **CAUTIONS:** are indicators of information that if ignored may lead to minor to moderate injury.

! **NOTES:** indicate tips and advice that can inform of features, aid assembly, or prevent damage to the product.

! WARNINGS !

- Hollis BC's are intended for use by divers who have successfully completed a nationally recognized course in scuba diving. Specifically, the SMS75 is for use only by persons who have completed a recognized sidemount training course.

- Hollis BC's must not be used by untrained persons who may not have knowledge of the potential risks and hazards of scuba diving

- As with all underwater life support equipment, improper use or misuse of this product can cause serious injury or death.

- Improper use of the oral inflation/deflation or dump valve assemblies may allow water to enter the BC resulting in a subsequent reduction in buoyancy. Loss of buoyancy control could result in serious injury or death.

- The SMS75 is designed for operating temperatures between 1° and 40° C.

- The SMS75 is limited to the use of single 20 L, two 15 L, or smaller cylinders

- This is not a life jacket; it does not guarantee a head up position of the wearer at the surface.

- DO NOT depend on any Hollis BC to save your life under any circumstances.

- Prior to each dive, inspect and test your BC for proper operation. If any part does not function properly, DO NOT USE!

- DO NOT inhale gases from within any Hollis BC.

- If you do not fully understand how to use your Hollis BC, or if you have any questions regarding its functions, you should seek instruction in its use from your authorized Hollis dealer before you utilize this product.

- Read and understand the owner's guide completely before diving with any Hollis BC.

- Have your Hollis equipment inspected and serviced annually or any time you have any concern about your equipment's function or condition by an authorized Hollis dealer.

- Any questions or concerns may be directed towards your local Hollis dealer. Alternately, you may contact one of our technical support representatives at 888-383-DIVE or info@hollisgear.com.

- It is the diver's responsibility to assure that fully configured, ready to dive systems are able to achieve neutral buoyancy at the beginning and end of any dive. Adding Non-Drop weights or switching from a single cylinder configuration to sidemount (2 cylinder) configuration can add significant in water weight.

INTRODUCTION

ASSESSMENT OF RISK

Hollis BC's are designed and intended for use by divers who have successfully completed a nationally recognized course in scuba diving which includes sidemount training for this specific product. Hollis equipment must **NOT** be used by untrained persons who may not have knowledge of the potential risks and hazards of scuba diving. As with all underwater life support equipment, improper use or misuse of this product can cause serious injury or death.

OVERVIEW

This User's Guide describes the unique functions and features of the SMS75 Sidemount Harness. The more acquainted that you become with your new kit, the more you will enjoy your diving experience. By following the instructions in this guide - you will understand how the SMS75 works, how to make best use of its features, and how to ensure it is set up best for your needs.

All Hollis BC's are constructed with the highest quality materials and utilize the latest computer aided design and manufacturing techniques to ensure their top performance and reliability.

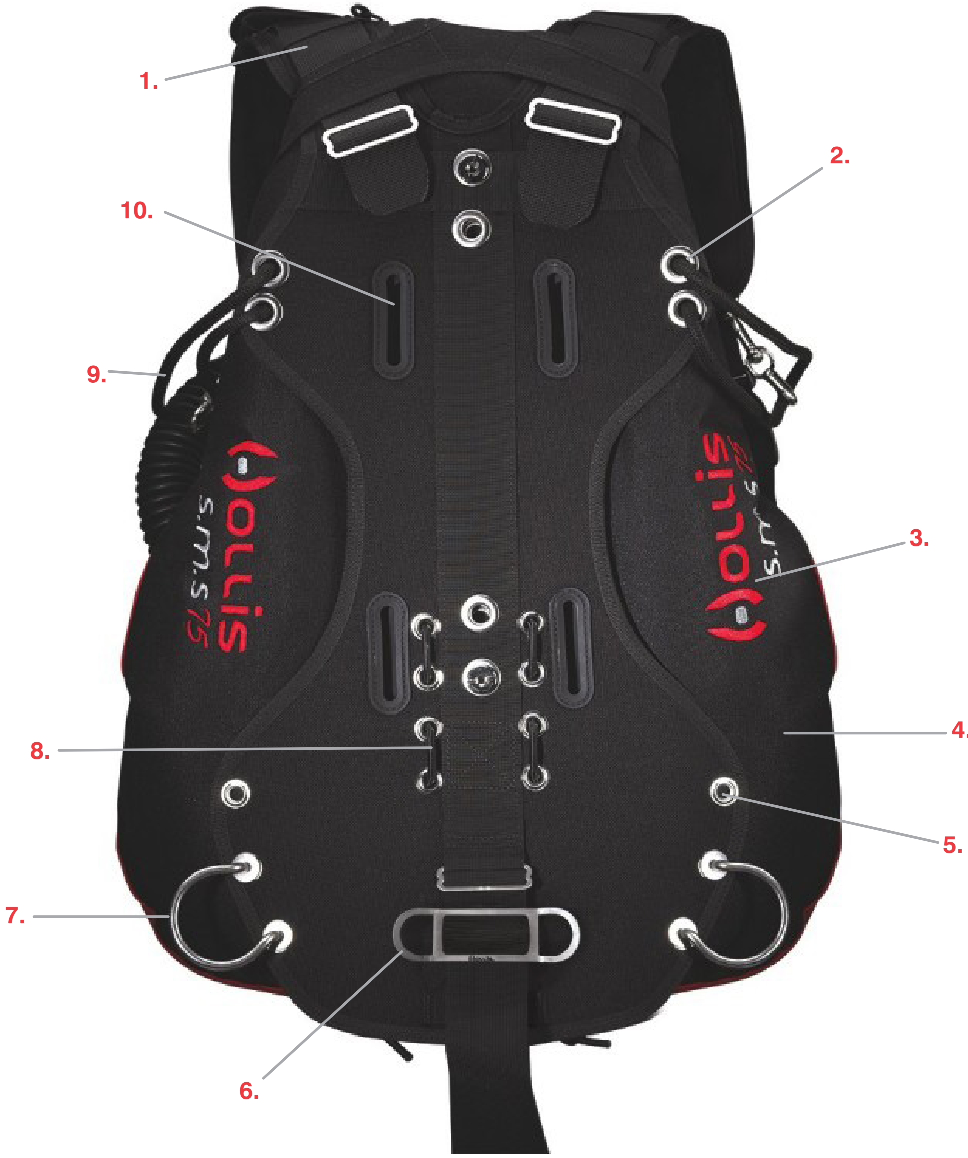
The SMS75 Sidemount Harness characteristics are ideal for sidemount cave divers but was designed for any diver. Whether you are a beginner, advanced or a technical diver this kit was designed for you. The kit comes pre-assembled making configuration much easier. The SMS75 is suitable for side mounting twin or single cylinders. It may also be used with rebreathers or rear mounted single tanks. This system is suitable in any environment from open water to overhead.

SIDEMOUNT DIVING ADVANTAGES:
- Greater Safety – Allows full visibility of the breathing system. The diver can perform gas checks/management, monitors all gauges, valves and hoses without assistance.
- Reduces additional gear – backplate / double bands / hardware / manifold - benefit when traveling
- Aids in transporting gear to and from the beach or boat (two or one tank at a time). This includes exiting the water on a boat dive.
- Streamlines profile which in turn reduces drag and energy which increases your bottom time

SYSTEM DETAILS:
- Upper & Lower cam band slots for rear mounted single tank
- Adjustable elastic bungee system (also removable)
- Trapezoid shape to promote horizontal trim
- Adjustable and removable wing bungee
- Cam slots for single tank and grommets at 11” for banded doubles
- Reversible Inflator & Dump assembly
- Rigging kit included: Tank bungees, SS Cam bands, SS Bolt snaps & nylon line
- Inner located elbow to avoid overhead interference

SPECIFICATIONS:
- 1000 Denier Cordura™ w/ PU lamination outer shell & 15 mm urethane internal bladder
- 360 Degree wing - 40 lbs/18 kg lift
- System weight 7 lbs/3.18 kg

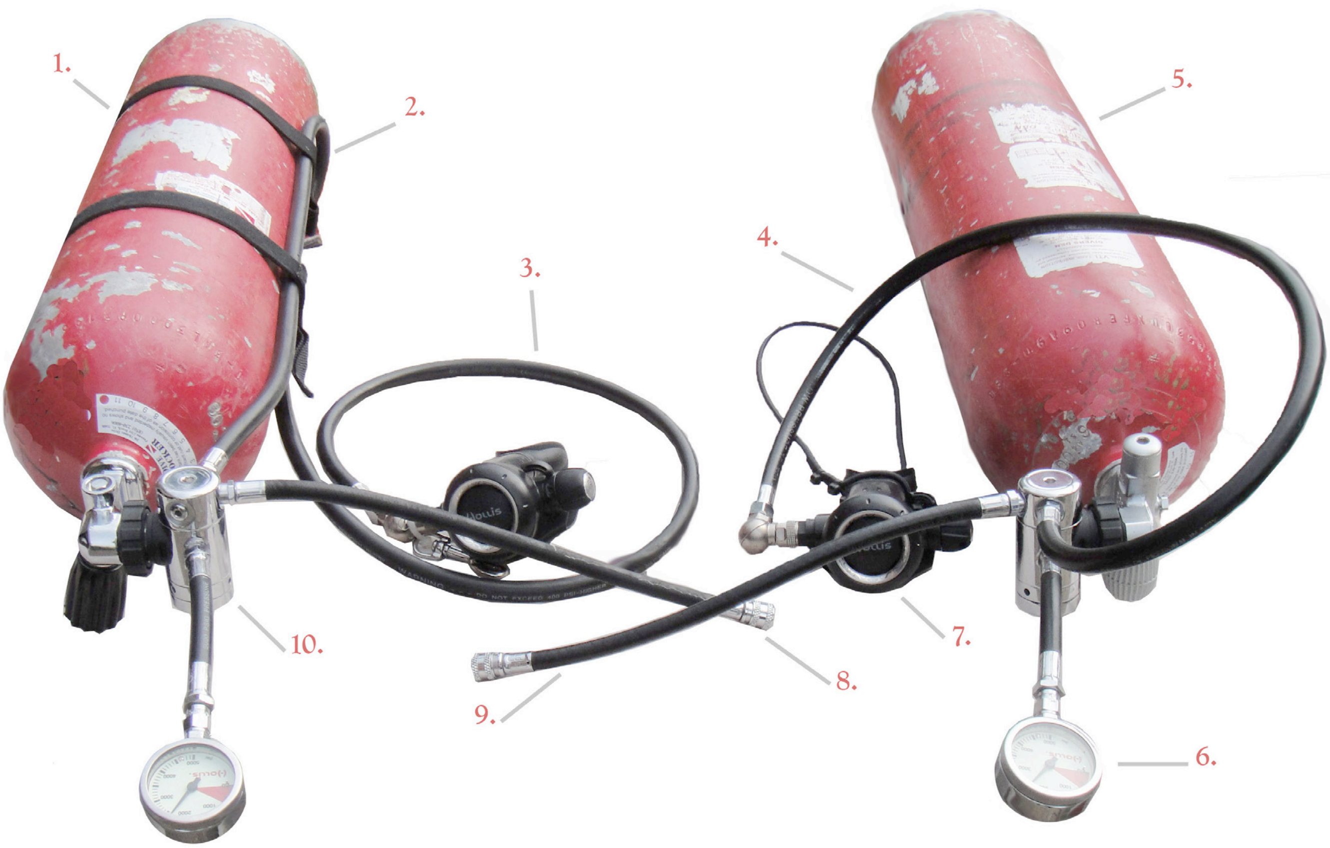
UNDERSTANDING THE SMS75 HARNESS



1. Shoulder Webbing woven through wing slots - Longer length to support shoulder weights
2. Grommets for bungee attachment
3. Embroidered Hollis logo
4. SMS75 Wing - 40 lbs/18 kg lift - 360 Degree wing
5. Alternate mounting points for rail system
6. Rear mounted dual offset D-ring for attaching accessories
7. Rail system used to attach sidemounted cylinders
8. Grommets and bungee for attachment of canister light assembly
9. Tank Bungee for holding cylinder close to the diver
10. Cam Strap slots for securing a single cylinder if needed

! NOTE: This is only a suggestion on how to configure your SMS75 Harness. There are other configurations that better suit your diving preferences.

HOW TO "RIG" YOUR CYLINDERS



1. Right side cylinder
2. Elastic tank bungee
3. 7 ft. low pressure hose w/bolt snap, connected to primary 2nd stage
4. 36 in. low pressure hose w/Reg necklace, connected to alternate 2nd stage5. Left Bottle
6. Brass SPG w/ 6" HP hose
7. 2nd stage (212 adjustable unit shown)
8. Alternate low pressure quick disconnect hose – for drysuit inflation if needed
9. Primary low pressure quick disconnect hose 15' – for LP inflator
10. First Stage – DIN (DC1 unit shown)

! NOTE: This is only a suggestion on how to configure your sidemount regulator kit. There are other configurations that may better suit your diving preferences.

ATTACHING CYLINDERS TO THE SMS75

Provided with each SMS75 complete harness is the hardware to support two sidemounted tanks.

This includes the following *(Fig. 1)*:
• SS Cam Bands – Qty 2
• SS Tri-Glides – Qty 2
• SS Bolt Snaps 4.5" – Qty 4
• Nylon Line (secures bolt snap to tank)



Fig. 1

The image to the right shows how to secure the hardware properly *(Fig. 2)*. The top bolt snap is considered a "safety clip" or a redundant point of attachment in addition to the bungee which wraps around the tank valve. This clip connects to the shoulder D-ring on both the left and right side of SMS harness. The lower clip is secured using the cam band and tri-glide. It then connects to the appropriate rail on the butt plate. Cam bands on both tanks should be roughly ¾ the way down the tank as shown in the image.

! NOTE: The lower bolt snap should be configured with the knot facing towards the top of the cylinder as shown. This is to provide additional security, preventing the knot from pulling out of the tri-glide and 2" webbing.

! NOTE: This is only a suggestion on how to configure your SMS75 Regulator Kit. There are other configurations that you may find better suit your diving preference.



Fig. 2

FINAL CONFIGURATION

Your SMS75 Harness comes pre-assembled which makes final configuration much easier.

The last step is the adjustment of the harness is to ensure proper fit when donning the harness. First tighten the waist strap. This will help the following steps pull the harness tight against the body. Next, secure the sternum strap to its appropriate length.

NOTE: Tighten the sternum strap just enough to keep the shoulder straps straight over the shoulder. DO NOT over-tighten which causes the straps to pull towards middle.

Finally, adjust the shoulder webbing. This should provide a firm and comfortable fit. You may need to give the sternum strap one final tug once complete.

The wing retention system or “bungee” is used to keep the wing streamlined when not fully inflated. It pulls the excess material in while still allowing full inflation. Adjusting the wing retention system can be done by unclipping the fastener attached to the lower 1” d-ring and moving to the desired location – usually up to an alternate d-ring. The bungee can also be trimmed to the desired length. However use caution as you may need this additional bungee length at a later date. Once trimmed it can not be replaced without replacing the whole strap.

NOTE: Over-tightening will reduce the amount of lift in the wing.

Although preparation will take a small time investment, once you have completed the configuration steps (rigging the tanks, attaching the cylinders, and adjusting the harness properly) your in water profile should look something like below. Trim is horizontal and streamlined.

NOTE: Cam band more towards the rear or bottom of tank = Feet down / Cam band more towards the front or top of tank = head down

Your training course outline will have specified alternate methods of achieving perfect trim.



REFERENCE/PART INFO

COMPLETE KITS

208.1375.003	SMS75 - SM/MD - Single Pkg
208.1375.005	SMS75 - LG/XL - Single Pkg
208.1375.007	SMS75 - XXL - Single Pkg

COMPONENT PARTS

208.1311	SMS75 Single Wing Only
240.1500	SMS Mains Regulator Kit
240.1600	SMS Deco Regulator Kit
240.1550	SMS Mains Rigging Kit
240.1650	SMS Deco Rigging Kit

SPECIFIC KIT INFORMATION

240.1500 - SMS Regulator Kit
Includes: (2) DC1 DIN / (2) 212 2nd stage / 36” LP hose / 84” LP hose / (2) Brass SPG / (2) 6” HP hose / Reg Necklace / 3” Bolt Snap / Tank Bungee

240.1600 – SMS Deco Regulator Kit
Includes: 02 Tech Regulator (1st/2nd stage & 40” LP hose) / Brass SPG / 6” HP hose / Tank Bungee / 3” Bolt Snap

240.1550 – SMS Mains Rigging Kit
Includes: (2) SS Cam Bands / (2) SS Tri-glides / (4) 4.5” SS Bolt Snaps / Nylon Line / Tank Bungee

240.1650 – SMS Deco Rigging Kit
Includes: SS Hose Clamp w/ Nylon sleeve / (2) 4.5” SS Bolt Snaps / Elastic Line / Tank Bungee

CARE AND MAINTENANCE

Your Hollis BC is a reliable piece of equipment that was designed to withstand the rigors of diving. It will last for many years if cared for properly. Follow the procedures below to ensure a long life for your BC. You should have the entire BC inspected and serviced annually by an authorized Hollis dealer to ensure it is operating properly and no components are showing signs of wear.

PRE DIVE CARE

Before each dive check to make sure your equipment is working properly. If any piece of equipment is not working properly, **DO NOT USE!** If damaged, return to your authorized Hollis Dealer for repair.

- Under pressure, attach the low pressure inflator hose to the inflator and depress the inflator button to make sure it is working properly.
- Check for leaks at the connection of the inflator.
- Check oral inflation/deflation button is working properly.
- Fill the BC system with air and check to make sure there are no leaks in the bladder.
- Check all dump valves to ensure air is not leaking in the closed position and that the air can be easily dumped.

POST DIVE CARE

To keep your BC in top condition, follow these procedures, in sequence, after each day of diving:

- Fill the BC one third full of fresh water through the inflator mouthpiece.
- Inflate fully, then rotate and shake, ensuring a complete internal rinse.
- Hold upside down and completely drain the water through the mouthpiece.
- Thoroughly rinse the outside of the BC with fresh water.
- Store partially inflated out of direct sunlight in a cool dry place.
- Periodically add BC disinfectant or Steramine™ (available in dive stores) to rinse water to kill any bacterial growth.
- Transport your BC in a padded carrying case or equipment bag, separated from sharp items (e.g., dive knife, spear gun, etc.) that might puncture the bladder.
- You should also protect the inflation system from damage due to heavy objects (e.g., dive light, weights, first stage, etc.).

RECORDS

SMS75 SERIAL NUMBER: ______________________

DATE OF PURCHASE: ______________________

HOLLIS DEALER: ______________________

DEALER PHONE NUMBER: ______________________

INSPECTIONS AND SERVICE

DATE	SERVICE PERFORMED	DEALER/TECHNICIAN

NOTES:

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